SPIRIT MEDICAL SYSTEMS GROUP

A Heritage of Quality | The Spirit of Innovation

MT200 Rehabilitation Treadmill

USER'S MANUAL

PLEASE READ THIS ENTIRE MANUAL CAREFULLY BEFORE OPERATING YOUR NEW TREADMILL AND SAVE IT FOR FUTURE USE.

Table of Contents

Product Registration……. 2

Important Safety Instructions…… 3

Important Electrical Information…… 4

Important Operation Instructions…….. 4

Features…….. 5

Operation of Your New Treadmill…….…… 9

MT200 Assembly Instructions……. 21

MT200 Drawing & Parts List…… 29

Maintenance…… 27

Maintenance Software Mode…… 35

Specifications…….. 37

Thank you for your recent purchase of this high quality physical rehabilitation treadmill, the MT200, from Spirit Medical Systems Group.

Your new product was manufactured by one of the leading fitness and medical products manufacturers in the world. Further, it is backed by one of the most comprehensive warranties in the industry. Through our dealers, distributors and manufacturer's representatives, we will do all we can to provide many years of successful and prosperous ownership. Your warranty and service needs will be addressed collaboratively through your regional sales representative and our highly trained service technicians.

The responsibility of that collaborative team is to provide you with both the technical knowledge and access to service personnel to make your ownership experience more informed, and resolution of any difficulties easier to remedy.

Two components of the Spirit Medical Systems Group's mission statement are "enhancing patient outcomes and improving effectiveness in the delivery of services". This is just one of the many products that will assist you in providing that care to your patients and/or clients.

Please take a moment at this time to record the name of the dealer, distributor, or manufacturer's representative, their telephone number, and the date of purchase below to make any future, needed contact easy. We appreciate your support and we will always remember that you are the reason that we are in business.

Please complete and mail your registration card today and enjoy your new MT200 treadmill.

Yours in Health and Wellness,
Spirit Medical Systems Group

Product Registration

RECORD YOUR SERIAL NUMBER

Please record the Serial Number of this fitness product in the space provided below. You can find the serial number on a sticker that is located on the front of the treadmill.

Serial Number_____

Important Safety Instructions

⚠ ***ATTENTION*** **- Read all instructions in this manual before using this device.**

⚠ ***DANGER*** **- To reduce the risk of electric shock disconnect your treadmill from the electrical outlet prior to cleaning and/or service work.**

⚠ ***WARNING*** **- To reduce the risk of burns, fire, electric shock, or injury to persons, install the treadmill on a flat level surface with access to a 220~240 volt AC, 50 Hz, 10-amp grounded outlet. Do not use an extension cord unless it is 14awg or larger, with only one outlet on the end. The treadmill should be the only appliance in the electrical circuit. Do not attempt to disable the grounded plug by using improper adapters, or in any way modify the cord set; a serious shock or fire hazard may result along with computer malfunctions.**

- Use this device only for it's intended use as described in this manual.
- Keep children away from the treadmill. There are moving parts, obvious pinch points and other caution areas that can cause harm.
- Except as instructed for use of the device, keep hands away from all moving parts.
- Keep the electrical cord away from heated surfaces and out of all travel lanes and do not operate the treadmill if the cord or plug is damaged.
- Never drop or insert any object into any openings.
- Do not use outdoors.
- To disconnect, turn all controls to the off position then remove the plug from the outlet.
- This device is designed for commercial use and will meet the demands of orthopedic, sports wellness and general conditioning programs.
- Do not attempt to use your treadmill for any purpose other than for the purpose it is intended.
- The pulse sensors are not medical devices. Various factors, including the user's movement, may affect the accuracy of heart rate readings. The pulse sensors are intended only as exercise aids in determining heart rate trends in general.
- WARNING: Heart rate monitoring system may be inaccurate. Over exercise may result in injury or death. If you feel faint stop exercising immediately.
- Ensure there is a minimum space on the sides of the treadmill of two feet for proper operation, easy access and to prevent possible injuries to others standing or walking nearby. There should be a minimum of at least one foot of free space at the front and three and a half feet at the rear.
- Do not use any after market parts on this device, other than those recommended by Spirit.
- Do not attempt any servicing or adjustments other than those described in this manual. All else must be left to trained service personnel familiar with electro-mechanical equipment and authorized under the laws of the country in question to carry out maintenance and repair work.
- Hold the handlebar for support when getting on or off the treadmill.
- To avoid injury please observe all minimum and maximum adjustment settings.
- Wear proper shoes. High heels, dress shoes, sandals or bare feet are not suitable for use on the treadmill. Quality athletic shoes are recommended to avoid leg fatigue.
- A safety tether cord is provided with this unit. It is a simple magnetic design that should be used at all times. It is for your safety should you fall or move too far back on the tread-belt. Pulling this safety tether cord will stop tread-belt movement.

Important Electrical Information

WARNING!

⚠ **NEVER** remove any cover without first disconnecting AC power. If voltage varies by ten percent (10%) or more, the performance of your treadmill may be affected. **Such conditions are not covered under your warranty.** If you suspect the voltage is low, contact your local power company or a licensed electrician for proper testing. Operating nominal power is 220~240 volt AC, 50 Hz, 10-amp.

⚠ **NEVER** expose this treadmill to rain or moisture. This product is **NOT** designed for use outdoors, near a pool or spa, or in any other high humidity environment. The temperature specification is 40 degrees c (104 deg f), and humidity is 95%, non-condensing (no water drops forming on surfaces).

Grounding Instructions

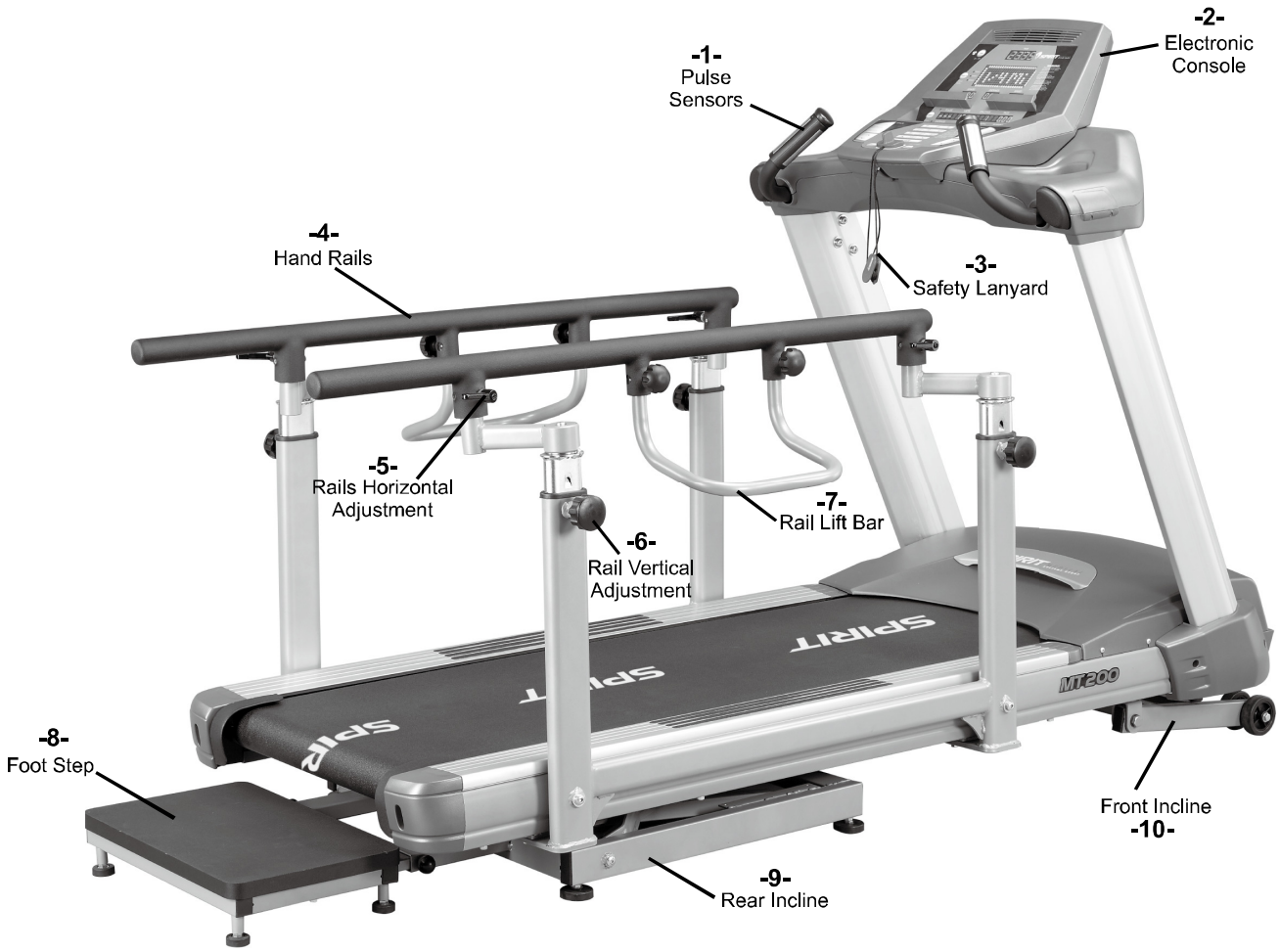
This product must be grounded. In the unlikely event that the treadmill's electrical system should malfunction or breakdown grounding provides a path of least resistance for electric current, reducing the risk of electric shock. This product is equipped with a cord having an equipment-grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

⚠ **DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product if it will not fit the outlet; have a proper outlet installed by a qualified electrician.**

Important Operation Instructions

- **NEVER** use the treadmill during an electrical storm. Surges may occur in your facility power supply that could damage the treadmill's components.
- **All users** should have medical clearance before starting any rigorous exercise program.
- **Start the user** at a safe exercise level. Do not allow the user to be over exerted. Symptoms to watch for, but not limited to, are: Shortness of breath or difficulty in breathing, pain or discomfort, feeling faint.
- **Make sure** the user warms up and cools down properly to avoid over taxing the cardio vascular system. Allow three to five minutes of warm up and cool down during each exercise session.

Features



MT200 – Rehabilitation Treadmill

Parts and Adjustments:

1. Pulse Sensors
2. Electronic Console
3. Safety Lanyard
4. Adjustable Hand Rails
5. Handrail Horizontal Adjustment
6. Handrail Vertical Adjustment
7. Handrail Lift Bar
8. Rear Step-up
9. Rear Incline
10. Front Incline

The Spirit MT200 is an easy product to set up and use, from the adjustments to the intuitive interface. This section explains how to set up, adjust and operate your MT200 from Spirit Medical Systems Group.

Leveling the MT200:

- Once the MT200 is assembled, and placed on a flat level floor, it may be necessary to adjust the four leveling glides on the bottom of the rear incline unit to ensure proper stability of the MT200. Use a 1/2" wrench to loosen the top nut of the leveler. Adjust the levelers by hand as necessary to remove any wobble in the unit. Then tighten the top nut against the bottom of the stabilizer tube. Make sure the bottom nut remains cinched against the leveling foot.

Connecting to A.C. Power:

- The MT200 A.C. mains input is located in the front of the unit. The input module has an input connector for the line cord, a power switch and a 10 amp circuit breaker. Turn the power switch to off when the MT200 is not in use.

Hand Rail Adjustments

Vertical Adjustment

Horizontal Adjustment

Lift Bar

Adjusting the hand rail vertical position:

- **To Lift:** Turn both the left and right knobs counter clockwise one or two rotations. Then just grab the lift bar and pull up. The locking pins in the knobs will automatically ratchet into the indexing holes in the tubes. Tighten the knobs when desired position is set. There is a numbered scale on the tubes for repeatable settings.
- **To Lower:** Loosen the two knobs and then pull them out and rotate slightly until the knob remains out on its own. The pin should now be disengaged from the tube and you can use the lift bar to lower the rails. Lower the rail past the position you desire and rotate the knob again so the pin can engage the holes in the tube. Now lift the rails to the desired position and lock the knob.

Adjusting the hand rail horizontal position:

- Turn both the left and right levers counter clockwise one rotation. Move the rails to the desired position and re-lock the levers. There are numbered scales on the tubes for repeatable settings. The levers may be blocked by the rotating tube when position is changed. The levers can be repositioned by pulling out and rotating them to a new position, allowing tightening.

Lift Bar:

- The lift bar will make raising and lowering the hand rails easier. You can remove the lift bars by loosening the locking knobs. Hold the bar with one hand and loosen the knobs with the other so the lift bar does not suddenly fall to the floor.

Rear Step:

- Additional step lowers the step-up height to 4 inches. To install or remove the step easily there are two removable pins located under the rear of the treadmill. Be sure these two pins are in place before using.

- **MT200 Electronic Console:**

Power on

When initially powered on the console will perform an internal self-test. During this time all the lights will turn on for a short time. The message window will display a software version (i.e. VER 1.0) and the distance window will display an odometer reading indicating how many virtual miles (or Kilometers) the treadmill has gone. The time window displays how many hours the treadmill has been used.

The odometer will remain displayed for only a few seconds then the console will go to the start up display, also known as Idle Mode. The dot matrix display will be scrolling through the different program profiles and the message window will be scrolling the start up message. You may now begin to use the MT200.

The console will automatically power down after 20 minutes of inactivity. Press any key to wake the console up again. To disable this function so console always remains powered on see Maintenance section on page 35. Always turn off the main power switch when the MT200 is not in use.

Console Operation:

1. Set Up

The Set Up key function will allow you to enter patient data and customize the settings of the MT200. When the Set Up key is pressed the first option in the menu appears. Use the up/down arrows to scroll through the menu and press the enter key to select an option.

Set Up menu:

1. Patient Data:
   - **Age:** used in Vo2 and heart rate programs.
   - **Gender:** used in Vo2 program.
   - **Weight:** used in METs and Calorie calculations and Vo2 program.
   - **Height:** used in the Symmetry program.

2. Deck Lift Mode:
   - This mode allows you to raise the entire deck parallel to the floor. In this mode the deck, rear step and hand rails can be used for step-up, step-down, stretching and PNF/PTA exercises.
   - Instructions for raising deck and step height chart:
     1. Press Set Up key at top left of console. Use Up arrow on keypad to Deck Lift option and press the Enter key. Use the Up arrow to select **ON** option and press Stop twice to exit.
     2. Now Press Start key. Message window will show that Deck Lift mode is enabled. Use the Incline keys to raise the entire deck. There are 10 levels available and height of the deck for each level is below.
     3. When finished press Stop to reset the deck lift mode so incline keys will return to normal operation. To use deck lift function you must enable it each time through the Set Up key.
     4. Deck height chart:

Deck Level #	Step to Deck Height		Floor to Deck Height (floor to step = 4")	
0	5 "	(12.7 cm)	9"	(22.9 cm)
1	5-1/2"	(14.0 cm)	9-1/2"	(24.0 cm)
2	5-3/4"	(14.6 cm)	9-3/4	(24.75 cm)
3	6"	(15.25 cm)	10"	(25.4 cm)
4	6-1/2"	(16.5 cm)	10-1/2"	(26.7 cm)
5	6-3/4"	(17.1 cm)	10-3/4"	(27.3 cm)
6	7"	(17.75 cm)	11"	(27.9 cm)
7	7-1/4"	(18.4 cm)	11-1/4"	(28.58 cm)
8	7-1/2"	(19.0 cm)	11-1/2"	(29.2 cm)
9	8"	(20.3 cm)	12"	(30.5 cm)
10	8-1/4"	(21.0 cm)	12-1/4"	(31.1 cm)

2. Quick Start

This is the quickest way to start an exercise session. After the console powers up you just press the Start key to begin; this will initiate the Quick Start mode. In Quick Start the speed will be set to zero until the user adjusts the speed. Time will count up from zero, all workout data will start to accrue and the speed and incline may be adjusted manually by pressing the Up or Down key. The dot matrix will display a speed level. As you increase the speed more rows will light indicating a harder workout.

The dot matrix has 24 columns of lights and each column represents 1 minute in the Quick Start program (time per column can be modified in other programs). At the end of the 24th column (or 24 minutes of work) the display will wrap around and restart at the first column again.

3. Basic information

The **Dot Matrix Display** is used for displaying graphic feedback and has three basic displays for most programs. When you begin a program the dot matrix will display a speed profile. To the left of the dot matrix there is a key labeled Display. Pressing this key will switch the display to show an incline grade and then a track. When the LEDs are blinking the graph will scan through the three displays.

The four **Data Windows** display:

- **Time:** Program time remaining, or elapsed time in quick start mode.
- **Incline Grade:** Front incline range 0 to 15 %. Rear Incline range 0 to minus 10%
- **Distance:** Displayed in miles or kilometers, selected in engineering mode (see page 35).
- **Speed:** Displayed in mph or kph. Range from minus 3 mph to plus 10 mph in 0.1 increments. True zero speed provided by a mechanical brake whenever motor is idle.

The **Message Window** is the main display for programming instructions and relevant measurements during a program. The measurement data shown varies depending on the program. Measurements include:

- **Pulse:** Heart rate monitor displayed in beats per minute, from 0 to 240 bpm.
- **METs:** Metabolic equivalent; values of activities range from 0.9 (sleeping) to 23 (running at 22.5 km/h or a 4:17 mile pace).
- **Calories:** Or kilocalorie (kcal), nutritional Calories burned during exercise.
- **Pace:** Displayed as minutes per mile (or kilometer).
- **Step Cadence:** Steps per minute average.
- **Step Length:** Heel strike to heel strike step length in inches or centimeters.
- **Symmetry:** The percentage of difference between the left and right step length.

To the left of the message window is a Display key that allows you to switch the data shown.

Below the Message window is a **Heart Icon** and a **Bar Graph.** Simply grasping the hand pulse sensors, or wearing a heart rate chest belt transmitter, will start the Heart Icon blinking (this may take a few seconds). The Message Window will display your heart rate in beats per minute. The Bar Graph represents the percentage of maximum heart rate. NOTE: Enter the correct age in Set Up for the Bar Graph to be accurate. Refer to Heart Rate section for details about these features.

4. Function Keys

The **Stop**/**Reset** key provides several functions:

- Pressing the Stop/Reset key once during a program will **Pause** the program. To resume the exercise session just press the Start key.
- If the Stop/Reset button is pressed twice during a workout the program will end and a summary of information for the exercise session will be displayed.
- If the Stop/Reset key is held down for 3 seconds the console will perform a complete **Reset.**
- During data entry for a program the Stop/Reset key performs a **Previous Screen** function. This allows you to go back one step in the programming each time you press the Stop/Reset key.

The **Program Keys** may be used to preview each program when in the idle mode. Press each program key to preview the program profile. To begin a program press the corresponding program key and then press the Enter key to select the program.

The program keys also function as a **Number Key Pad** when you are in the data-setup mode. The number for each key is shown below the program name. If you are entering new data such as Time, Age, weight etc., you can use these keys to enter the numbers quickly.

Reverse Walking: This key sets the belt direction to either reverse or forward. If the belt is already set in the reverse direction, it will change the direction of the belt to forward. This function only operates in Quick Start or Manual mode. If the belt is moving when the key is pressed the belt will slow down to zero speed then allow speed in the opposite direction. The maximum reverse speed is 3.0 mph (5.0 kph).

Acceleration Rate: This function adjusts the acceleration and deceleration rate of the walking belt by allowing you to change the amount of time it takes for the belt to change speeds. The adjustment value is in seconds. You can input how many seconds it takes for the belt to change 1 mph of speed. The default setting is 3 seconds, which means the belt will take 3 seconds to go from zero to 1 mph. The range can be set from 1 second to 60 seconds. This function is disabled when the treadmill is shipped and you will have to enter the Engineering mode to activate (see page 35 for engineering mode)

Zero Speed: This key's function returns the belt to zero speed when pressed.

Decline: Allows operation of the rear incline motor for Decline function. This key only operates in Quick Start or Manual modes.

Incline: Press this key to return to front incline function.

Zero Percent: Returns the deck to zero percent when pressed.

5. Selecting and customizing programs

When a program is selected you have the option of modifying the settings. If you want to begin without entering new settings just press the Start key. This will bypass the programming of data and take you directly to the start of the program. If you want to change the settings just follow the instructions in the message window. When you start a program the data from the Set Up menu will be used.

Manual

The Manual program works as the name implies, manually. This means that you control the workload yourself, not the computer. To start the Manual program follow the instructions below or just press the Manual button then the Enter button and follow the directions in the message window.

1. Press the **Manual** key then press the **Enter** key.
2. The message window will prompt you to enter the time for the program. You may enter the time using the Up and Down keys or the numeric key pad then press the Enter key to accept.
3. Now you are finished editing the settings and can begin the program by pressing the Start key. All data calculations will use the patient information from the Set Up function (Set Up key at top left of console).
4. During the Manual program you will be able to scroll through the data in the message window by pressing the **Display key**. You may also switch between the speed, incline or track displays by pressing the Display key adjacent to the dot matrix display.
5. When the program ends you may press Start to begin the same program again or Stop to exit the program, or you can save the program you just completed as the **Facility** program by pressing the Facility key and following the instructions in the message window.

Preset Programs

The treadmill has four preset exercise programs that have been designed for a variety of goals. The initial built-in level of difficulty for each program is set to a relatively easy level. You may adjust the level of difficulty (Max speed) for each program before beginning.

The profiles shown in the dot matrix are merely pictures of the whole profile and will not change in size when the speed keys are pressed. When setting up a program you will enter the maximum speed setting for the peak of the profile. During the program the speed levels will change as the profile progresses. When the up key is pressed to request more speed the profile picture will not change, but the speed will increase. Pressing the speed keys actually change the peak level of the program not the current segment speed. You may need to change the peak setting several times by pressing the speed key before the current segment increases.

Preset programs speed and incline settings

The preset program speed and incline levels are shown in the chart below. The Speed numbers shown in the chart indicate a percentage of the top speed of the program. For instance, the first Speed setting for the HILL program shows the number 20. This means that this segment of the program will have a speed that is 20% of the top speed for the program (The user sets the top speed when a program is selected). If the user sets the top speed to 10 mph (16 kph), then the first segment will be 2 mph (3.2 kph). You will notice that segment 12 shows 100. This means the set speed will be 100% of 10 mph (16 kph) or simply 10 mph (16 kph).

Prog	SEG	Warm up			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Cool down		
Hill	Speed	20	30	40	50	60	60	70	70	70	80	80	70	80	80	100	100	70	80	80	70	70	80	80	70	60	60	50	40	30	20
	Incline	0	0	0	0	1	2	3	3	4	3	3	4	4	5	3	3	4	3	3	4	4	5	4	3	1	1	0	0	0	0
Plateau	Speed	20	30	40	50	60	60	70	80	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	80	70	60	50	40	30	20
	Incline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cardio	Speed	20	30	40	50	60	60	70	70	70	80	70	70	80	80	60	70	80	80	70	70	70	100	70	80	60	60	50	40	30	20
	Incline	0	0	0	0	1	1	1	2	2	3	2	2	3	3	1	2	3	3	2	2	4	4	2	3	1	1	0	0	0	0
Interval	Speed	20	30	40	50	60	60	70	80	100	60	60	70	80	100	60	70	100	60	70	100	60	70	80	70	60	60	50	40	30	20
	Incline	0	0	0	0	1	2	3	5	6	2	3	5	6	7	2	3	7	2	3	8	2	3	5	4	3	1	0	0	0	0

Programming Preset Programs:

1. Select a program then press the enter key to begin customizing the program settings, or just press the start key to begin the program with the default settings. All data calculations will use the patient information from the Set Up function (Set Up key at top left of console).

2. After selecting a program, press enter to set the program time. The **Time** window will blink with the default value of 20 minutes. You may use any of the up/down keys to adjust the time. After adjusting the time, press enter. (Note: You may press start at any time during the programming to begin with only settings you have modified at that point).

3. The **Speed** window will now be blinking, showing the preset top speed of the selected program. Use the Up/Down keys to adjust, and then press enter. Each program has various speed changes throughout; this allows you to limit the highest speed the program will attain during your workout.

4. Now press the Start key to begin your workout.

5. There will be a 3 minute warm-up to begin. You can press the start button to bypass this and go straight to the workout. During the warm-up the clock will count down from 3 minutes.

Facility Program

The Facility program allows you to build and save a custom program. You can build your own custom program by following the instructions below or you can save any other preset program you complete as a custom program. The Facility program allows you to further personalize it by adding your facility name.

Designing and saving a new program:

1. Press the **Facility** key. The message window will show a welcome message; if you had previously saved a program the message will contain the name you gave it. Then press the **Enter** key to begin programming.

2. When you press enter, the message window will show “Name – A”, if there is no name

saved. If the name “Custom Workout” had been previously saved the message window will show “Name – Custom Workout” and the C in Custom will be blinking. If there is a name saved you can change it or you may press the Stop key to keep the name and continue to the next step. If you want to enter a name use the Up and/or the Down key to change the first letter then press Enter to save the first letter and continue to the next letter. When you have finished entering the name press the Stop key to save the name and continue to the next step.

3. The message window will ask you to enter an **Age**. You may enter an Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.

4. You are now asked to enter a **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad then press enter to continue.

5. Next is **Time**. You may adjust the Time and press enter to continue.

6. Now you are asked to adjust the **Max Level.** This is the peak exertion level you will experience during the program. Adjust the level and then press enter.

7. Now the first column will be blinking and you are asked to adjust the level for the first segment of the workout. When you finish adjusting the first segment, or if you don’t want to change, then press enter to continue to the next segment.

8. The next segment will show the same level as the previously adjusted segment. Repeat the same process as the last segment then press enter. Continue this process until all twenty four segments have been set.

9. The message window will then tell you to press enter to save the program. After saving the program the message window says “New program saved” then will give you the option to Start or modify the program. Pressing Stop will exit to the start up screen.

10. During the Facility program you will be able to scroll through the data in the message window by pressing the adjacent **Display** key.

Running a saved program:

1. Press Facility key then Enter
2. Enter Time then press enter. Then press start to begin program.

Vo2 Test

The VO2 test is based on the Gerkin protocol, also known as the fireman's protocol, and is a sub-max Vo2 (volume of oxygen) test. The test will increase speed and elevation alternately until 85% of Max heart rate is attained. The time it takes the heart rate to reach 85% determines the test score (Vo2 max) as shown in the chart below.

Stage	Time	Speed	Grade	VO2 Max
1	0 to 1:00	4.5mph	0%	31.15
2.1	1:15	4.5mph	2%	32.55
2.2	1:30	4.5mph	2%	33.6
2.3	1:45	4.5mph	2%	34.65
2.4	2:00	4.5mph	2%	35.35
3.1	2:15	5.0mph	2%	37.45
3.2	2:30	5.0mph	2%	39.55
3.3	2:45	5.0mph	2%	41.3
3.4	3:00	5.0mph	2%	43.4
4.1	3:15	5.0mph	4%	44.1
4.2	3:30	5.0mph	4%	45.15
4.3	3:45	5.0mph	4%	46.2
4.4	4:00	5.0mph	4%	46.5
5.1	4:15	5.5mph	4%	48.6
5.2	4:30	5.5mph	4%	50
5.3	4:45	5.5mph	4%	51.4
5.4	5:00	5.5mph	4%	52.8
6.1	5:15	5.5mph	6%	53.9
6.2	5:30	5.5mph	6%	54.9
6.3	5:45	5.5mph	6%	56
6.4	6:00	5.5mph	6%	57
7.1	6:15	6.0mph	6%	57.7
7.2	6:30	6.0mph	6%	58.8
7.3	6:45	6.0mph	6%	60.2
7.4	7:00	6.0mph	6%	61.2
8.1	7:15	6.0mph	8%	62.3
8.2	7:30	6.0mph	8%	63.3
8.3	7:45	6.0mph	8%	64
8.4	8:00	6.0mph	8%	65
9.1	8:15	6.5mph	8%	66.5
9.2	8:30	6.5mph	8%	68.2
9.3	8:45	6.5mph	8%	69
9.4	9:00	6.5mph	8%	70.7
10.1	9:15	6.5mph	10%	72.1
10.2	9:30	6.5mph	10%	73.1
10.3	9:45	6.5mph	10%	73.8
10.4	10:00	6.5mph	10%	74.9
11.1	10:15	7.0mph	10%	76.3
11.2	10:30	7.0mph	10%	77.7
11.3	10:45	7.0mph	10%	79.1
11.4	11:00	7.0mph	10%	80

Before the test:

- Make sure you are in good health; check with your physician before performing any exercise if you are over the age of 35 or persons with pre-existing health conditions.
- Make sure you have warmed up and stretched before taking the test.
- Do not take in caffeine before the test.
- If using the hand pulse sensors hold the hand grips gently, do not tense up.

Fitness test programming:

1. Press the VO2 key and press enter.
2. The message window will ask you to enter your **Age**. You may adjust the age setting, shown in the Incline window, using the Up and Down keys then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your **Weight**. You may adjust the weight setting, shown in the Distance window, using the Up and Down keys then press enter to continue.
4. Now press Start to begin the test.

During the test:

- The console must be receiving a steady heart rate for the test to begin. You may use the hand pulse sensors or wear a heart rate chest strap transmitter.
- The test will start with a 3 minute warm-up at 3 MPH (4.8 kph) before the actual test begins.
- The data shown during the test is:
    a. **Time** indicates total elapsed time
    b. **Incline** in percent grade
    c. **Distance** in Miles or Kilometers depending on preset parameter.
    d. **Speed** in MPH or KPH depending on preset parameter.
    e. **Target** Heart Rate and **Actual** Heart Rate are shown in the message window.

After the test:

- Cool down for about one to three minutes.
- Take note of your score because the console will automatically return to the start-up mode after a few minutes.

What the score indicates:

VO2max Chart for males and very fit females

	18-25 years old	26-35 years old	36-45 years old	46-55 years old	56-65 years old	65+ years old
excellent	>60	>56	>51	>45	>41	>37
good	52-60	49-56	43-51	39-45	36-41	33-37
above average	47-51	43-48	39-42	35-38	32-35	29-32
average	42-46	40-42	35-38	32-35	30-31	26-28
below average	37-41	35-39	31-34	29-31	26-29	22-25
poor	30-36	30-34	26-30	25-28	22-25	20-21
very poor	<30	<30	<26	<25	<22	<20

VO2max Chart for females and de-conditioned males

	18-25 years old	26-35 years old	36-45 years old	46-55 years old	56-65 years old	65+ years old
excellent	56	52	45	40	37	32
good	47-56	45-52	38-45	34-40	32-37	28-32
above average	42-46	39-44	34-37	31-33	28-31	25-27
average	38-41	35-38	31-33	28-30	25-27	22-24
below average	33-37	31-34	27-30	25-27	22-24	19-22
poor	28-32	26-30	22-26	20-24	18-21	17-18
very poor	<28	<26	<22	<20	<18	<17

Symmetry

The Symmetry program provides basic gait information and a feedback graph. The program will measure the left and right step length and calculates the symmetry index. The message window will display the user's Cadence, Left and Right step length in inches (or centimeters) and Symmetry index.

The Dot Matrix display will show a graph indicating step symmetry so the user has a visual feedback to aid in improving their gait. If the user has a longer step length with their left leg the graph will increase in size on the left of the dot matrix as shown below.

When the program ends, either by the set time reaching zero or pressing stop twice at any time during the program, a summary is shown in the message window. The summary gives the average cadence, step lengths and average symmetry for the amount of time the user walked.

1. Press the Symmetry key then press the **Enter** key.
2. The message window will prompt you to enter the **Time** for the program. You may enter the time using the Up and Down keys or the numeric key pad then press the Enter key to accept and proceed to the next screen.
3. Now you are finished editing the settings and can begin by pressing the Start key. All data calculations will use the patient information from the Set Up function (Set Up key at top left of console).
4. During the program you will be able to scroll through the data in the message window by pressing the **Display key**.
5. When the program ends you may press Start to begin the same program again or Stop to exit the program, or you can save the program you just completed as the **Facility** program by pressing the Facility key and following the instructions in the message window.

Biofeedback Graph:

Below is a sample picture showing the symmetry graph. In the message window there is an average step cadence, left and right step length and symmetry measurements. In the example below the step length numbers shown indicate that the left leg is stepping longer than the right leg, 26 vs. 15 inches. The graph reflects the longer stride of the left leg. If the step length was even only two dots would be lit on the bottom center of the graphic screen.

Note: For some types of gaits it may be possible that the left/right data can be displayed in reverse. If this occurs press the Symmetry program key to flip the display.

Using a Heart Rate Transmitter

*NOTE: The chest strap transmitter is not a standard part, but is a separate purchase.
How to wear your wireless chest strap transmitter:

1. Attach the transmitter to the elastic strap using the locking parts.
2. Adjust the strap as tightly as possible as long as the strap is not too tight to remain comfortable.
3. Position the transmitter with the logo centered in the middle of your body facing away from your chest (some people must position the transmitter slightly left of center). Attach the final end of the elastic strap by inserting the round end and, using the locking parts, secure the transmitter and strap around your chest.
4. Position the transmitter immediately below the pectoral muscles.
5. Sweat is the best conductor to measure very minute heart beat electrical signals. However, plain water can also be used to pre-wet the electrodes (2 black square areas on the reverse side of the belt and either side of transmitter). It's also recommended that you wear the transmitter strap a few minutes before your work out. Some users, because of body chemistry, have a more difficult time in achieving a strong, steady signal at the beginning. After "warming up", this problem lessens. As noted, wearing clothing over the transmitter/strap doesn't affect performance.
6. Your workout must be within range - distance between transmitter/receiver – to achieve a strong steady signal. The length of range may vary somewhat but generally stay close enough to the console to maintain good, strong, reliable readings. Wearing the transmitter immediately against bare skin assures you of proper operation. If you wish, you may wear the transmitter over a shirt. To do so, moisten the areas of the shirt that the electrodes will rest upon.

Note: The transmitter is automatically activated when it detects activity from the user's heart. Additionally, it automatically deactivates when it does not receive any activity. Although the transmitter is water resistant, moisture can have the effect of creating false signals, so you should take precautions to completely dry the transmitter after use to prolong battery life (estimated transmitter battery life is 2500 hours). If your chest strap has a replaceable battery the replacement battery is Panasonic CR2032.

Erratic Operation:

***Caution!* Do not use this treadmill for Heart Rate Control unless a steady, solid Actual Heart Rate value is being displayed. High, wild, random numbers being displayed indicate a problem.**

Areas to look at for interference, which may cause erratic heart rate:

(1) Microwave ovens, TVs, small appliances, etc.
(2) Fluorescent lights.
(3) Some household security systems.
(4) Perimeter fence for a pet.
(5) Some people have problems with the transmitter picking up a signal from their skin. If you have problems try wearing the transmitter upside down. Normally the transmitter will be oriented so the Spirit logo is right side up.
(6) The antenna that picks up your heart rate is very sensitive. If there is an outside noise source, turning the whole machine 90 degrees may de-tune the interference.
(7) If there is another person wearing a chest strap within 1 meter, it will interfere.
(8) If you continue to experience problems contact your dealer.

Heart Rate Program operation

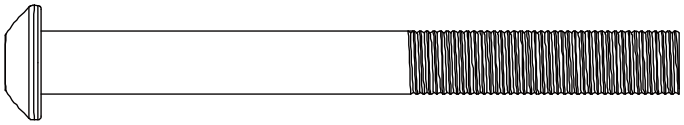
To start the **HR** program follow the instructions below or just press the HR key then the Enter button and follow the directions in the message window.

1. Press the **HR** key then press the **Enter** key.
2. The message window will ask you to enter your **Age**. You may enter your Age, using the Up and Down keys or the numeric key pad, then press the Enter key to accept the new number and proceed on to the next screen.
3. You are now asked to enter your **Weight**. You may adjust the Weight number using the Up and Down keys or the numeric key pad, then press enter to continue.
4. Next is **Time**. You may adjust the Time and press enter to continue.
5. Now you are asked to adjust the **Heart rate Level.** This is the heart rate level you will experience during the program. Adjust the level and then press enter.
6. Now you are finished editing the settings and can begin your workout by pressing the Start key. You can also go back and modify your settings by pressing the Enter key. NOTE: At any time during the editing of Data you can press the Stop key to go back one level, or screen.
7. If you want to increase or decrease the workload at any time during the program press the Up or Down key. This will allow you to change your target heart rate at any time during the program.
8. During the HR program you will be able to scroll through the data in the message window by pressing the adjacent **Display key.**
9. When the program ends you may press Start to begin the same program again or Stop to exit the program or you can save the program you just completed as a custom user program by pressing the Facility key and following the instructions in the message window.

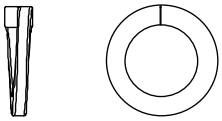
ASSEMBLY INSTRUCTIONS FOR MT200

1) Hardware

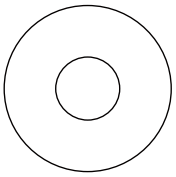
STEP 1



#104-3/8" x 3-3/4" (6PCS)

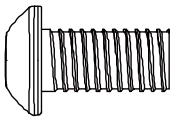


#58-3/8" x 2T x 4H (6PCS)

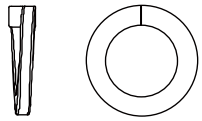


#59-3/8" x 25 x 2T (6PCS)

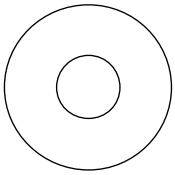
STEP 2



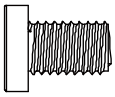
#153-3/8" x 3/4" (6PCS)



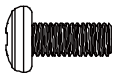
#58-3/8" x 2T x 4H (6PCS)



#59-3/8" x 25 x 2T (6PCS)

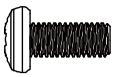


#108-M8 x 12L (6PCS)



#73-M5 x12L (4PCS)

STEP 3



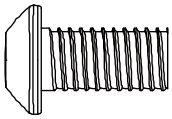
#73-M5 x 12L (1PCS)

#110-M5 x 10L (2PCS)

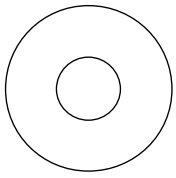
#112-M5 x 30L (2PCS)

#125-M5 (1PCS)

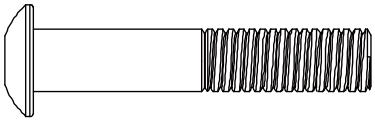
STEP 4



#153-3/8" x 3/4" (8PCS)



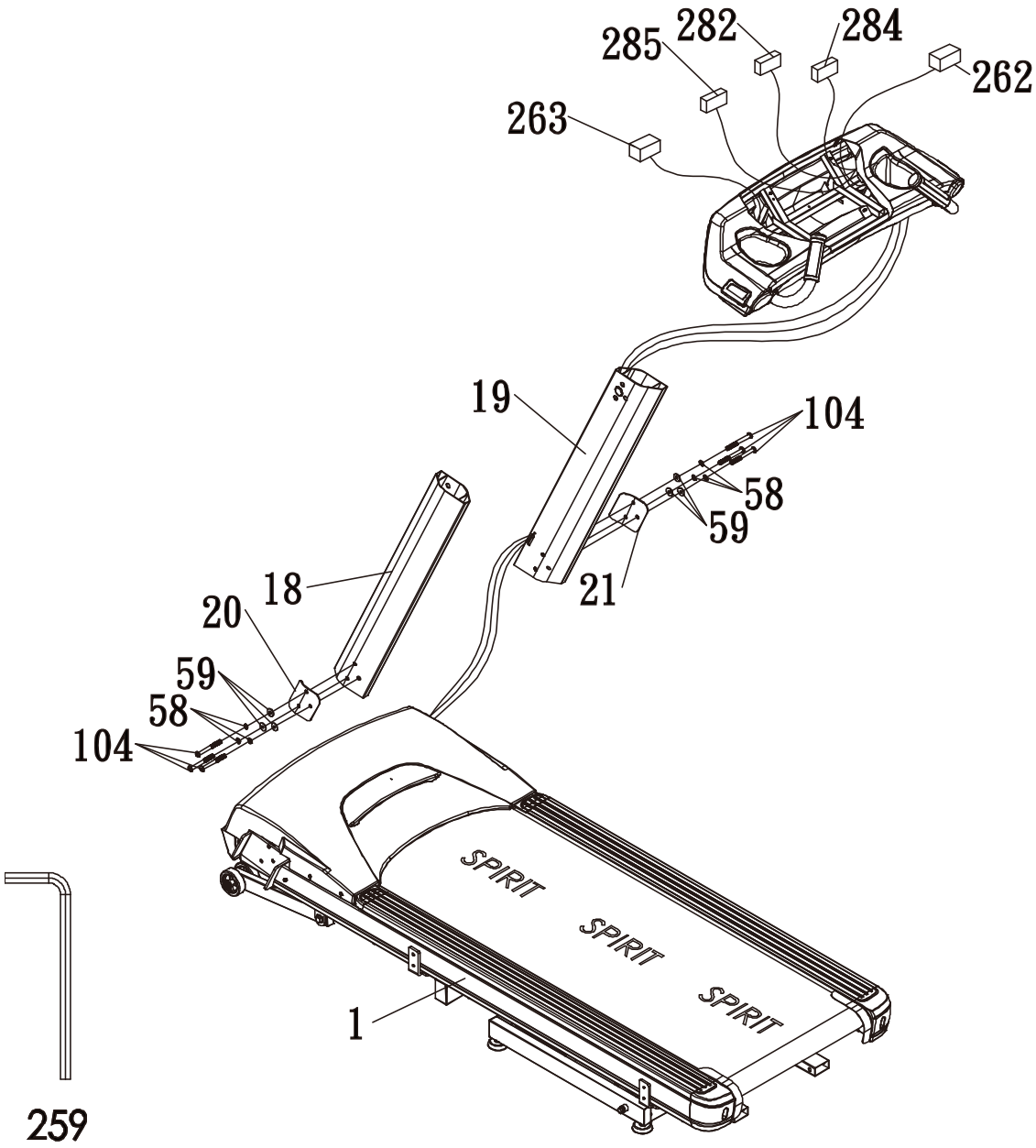
#59-3/8" x 25 x 2T (8PCS)



#226-3/8" x 2" (8PCS)

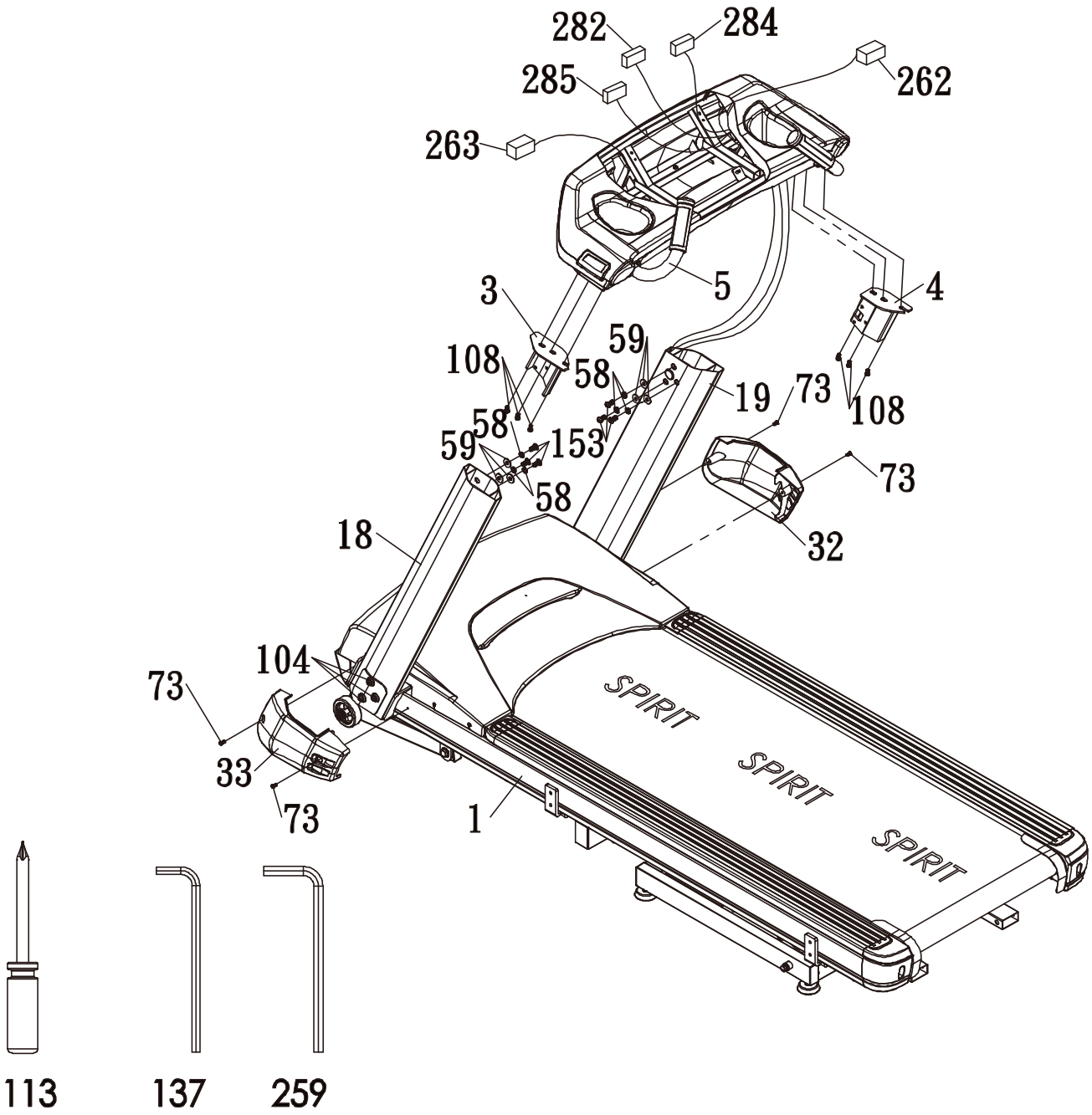
Step 1: Upright Tubes

- The right side upright tube (19) has the computer cables pre-installed. Lift the tube off the walking surface and attach it to the base frame. You need to gently pull on the computer cables as you align the upright tube into the bracket on the base frame, taking the slack out so the cable does not get pinched between the tube and the base frame. Assemble one 3/8” x 3-3/4” bolt (104), 3/8” split washer (58) and 3/8” flat washer (59) through the top hole in the retaining plate (21), and corresponding top hole in the upright tube, and screw into the base frame. Now install the other two bolts (104) and washers (58 & 59) and hand tighten all three. Do not torque the bolts yet until the upper console frame is installed.
- Install the left upright (18) in the same manner.



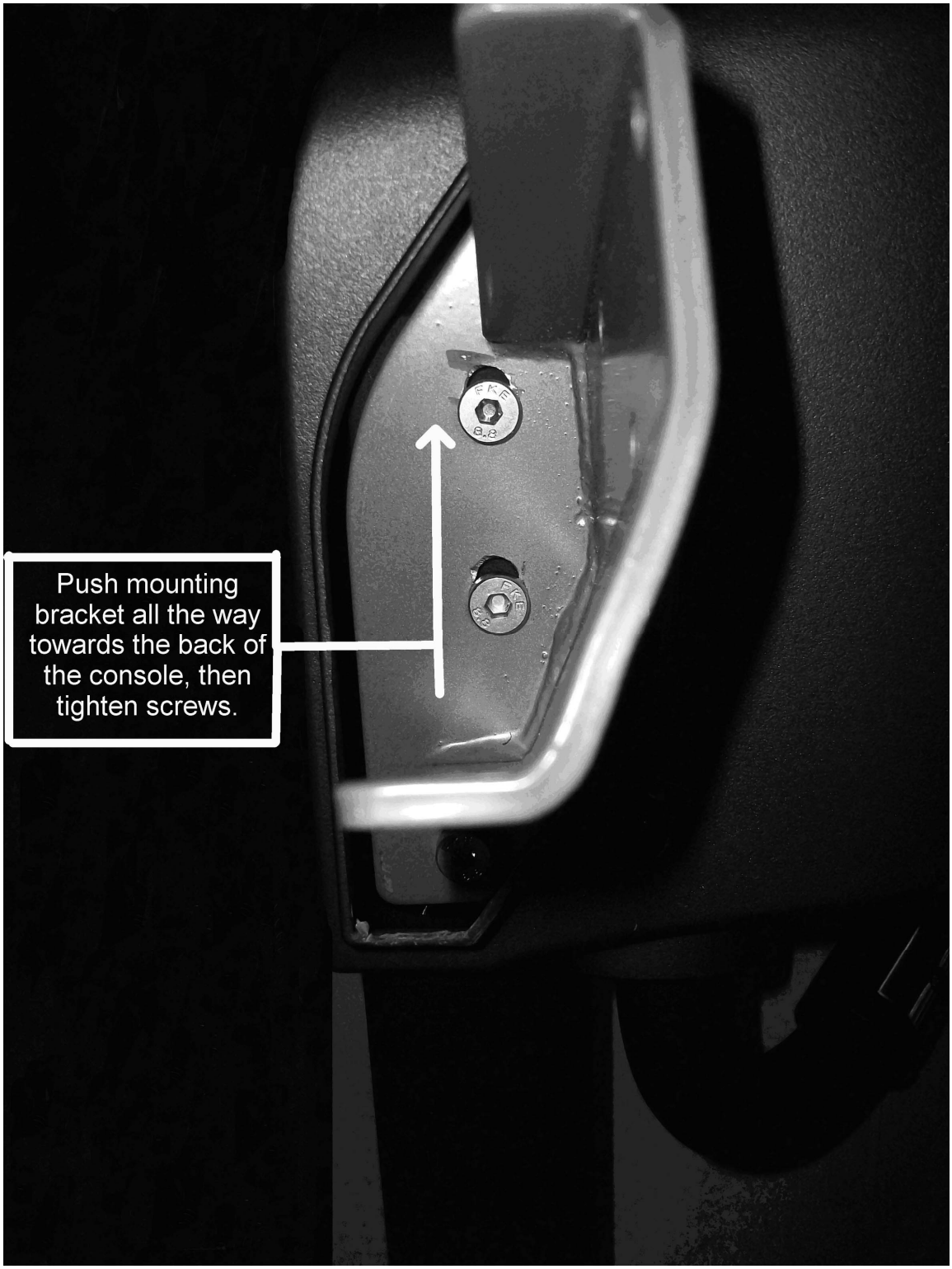
Step 2: Console Frame Assembly

- Install the two mounting brackets (3 & 4) with the six M8 x 12mm screws (108). Refer to the important instructions on the following page for this step.
- Mount the console frame (5) to the upright tubes (18 & 19) with six 3/8” x 3/4” bolts (153), 3/8” split washers (58) and 3/8” flat washers (59). Be careful not to pinch the computer cables.
- Firmly tighten the six bolts (104) at the bottom of the uprights and install the two end caps (32 & 33) with the four M5 x 12mm screws (73).



IMPORTANT ASSEMBLY INSTRUCTION

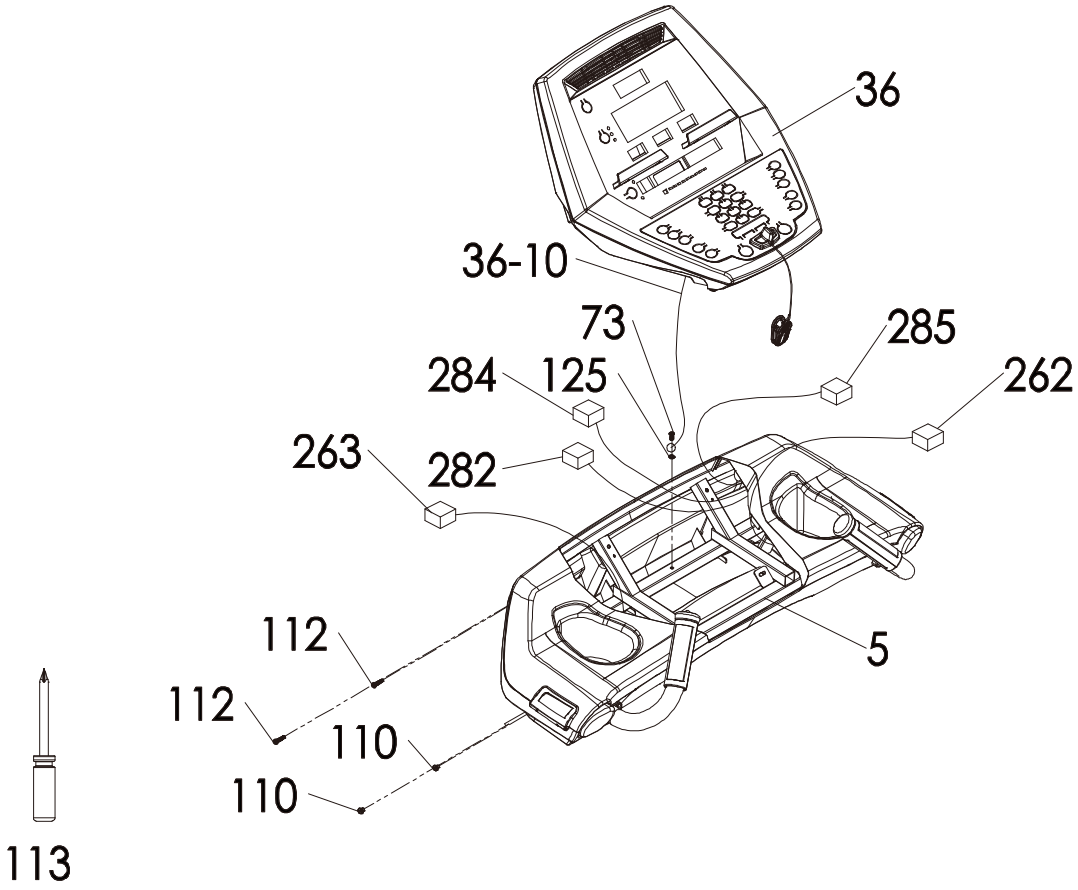
When assembling the console mounting brackets (Items 3&4) please be sure to slide the brackets all the way towards the back of the console frame before tightening the bolts.



Step 3: Console Assembly

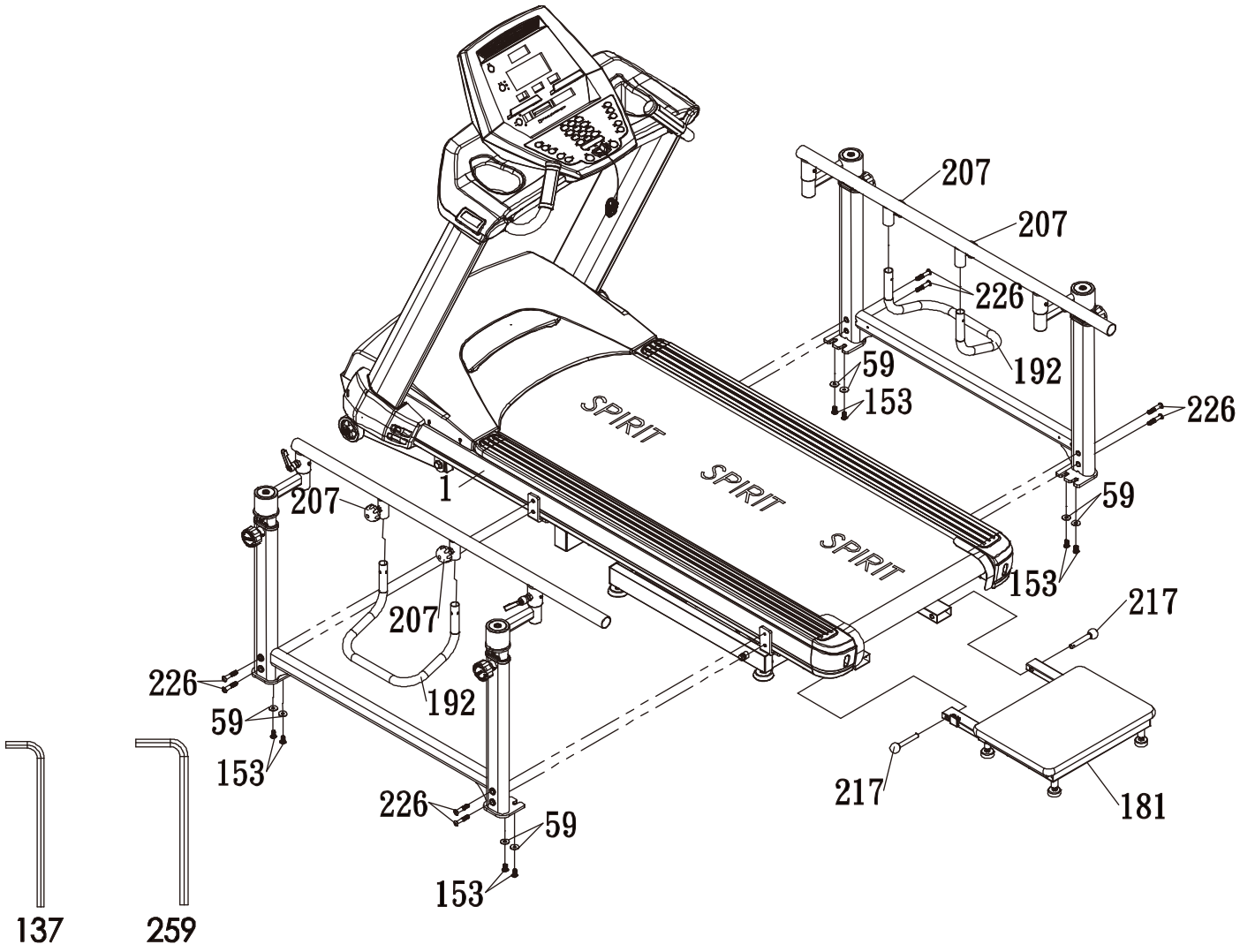
- Plug all the connectors in back of the console and two in-line hand pulse connectors. Attach the ground cable to the hole in the steel frame with a M5 x 12 mm screw (73) and a M5 star washer (125).

- Mount the console (36) to the console frame (5) with two M5 x 30mm screws (112) in the top holes and two M5 x 10mm screws (110) in the bottom holes in the back side of the console frame.



Step 4: Parallel Bar Handrail Assembly

- Install the eight 3/8” x 3/4” bolts (153) and 3/8” flat washers (59) into the holes on the underside of the frame. Only thread them into the holes two or three turns so the slots in the handrail brackets can slide onto the bolts easily. Slide the handrail onto the bolts and hand-tighten them. Thread the eight 3/8” x 2” bolts (226) into the sides of the handrails. Once all the bolts are installed tighten all of them securely.
- Install the Lift Bars (192) to the parallel bars and secure with the knobs (207).
- Install the rear step (181) by sliding into the receiving tubes under the rear of the deck and secure with the two pins (217). Raising the rear incline may make it easier to line up the holes for the pins.



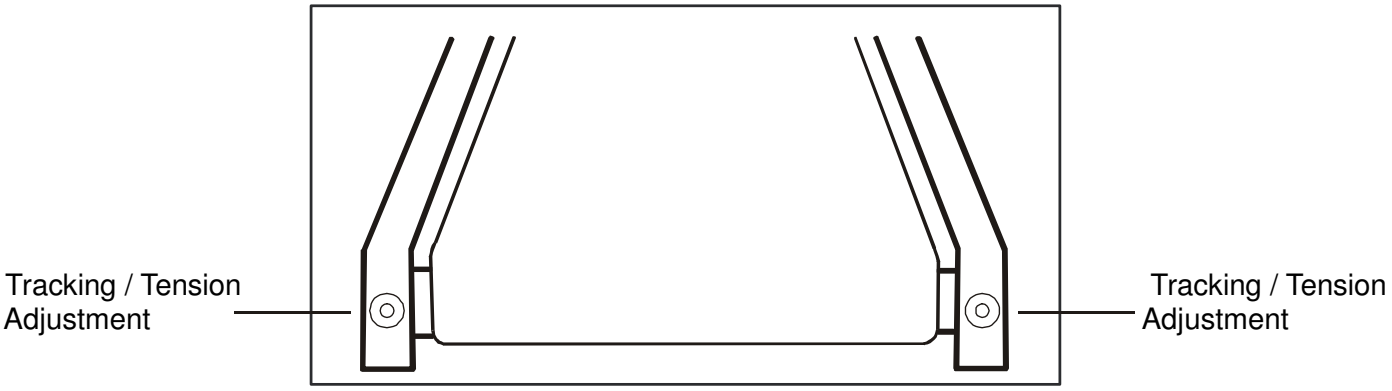
Maintenance:

Belt and Deck - Your treadmill uses a very high-efficient low-friction deck and belt. Performance is maximized when the bed is kept as clean as possible. Use a soft, damp cloth or paper towel to wipe the edge of the belt and the area between the belt edge and frame. Also reach as far as practical directly under the belt edge. This should be done once a month to extend belt and deck life. Use water only - no cleaners or abrasives. A mild soap and water solution along with a nylon scrub brush will clean the top of the textured belt. **Allow the belt to dry before using.**

General Cleaning - Dirt, dust, and carpet fibers can block air inlets and accumulate on the running belt. On a monthly basis: vacuum underneath your treadmill to prevent buildup. Once a year, you should remove the motor hood and vacuum out dirt that may accumulate. UNPLUG POWER CORD BEFORE THIS TASK.

BELT ADJUSTMENTS:

Tread-belt Tension Adjustment - Adjustment must be made from the rear roller. The adjustment bolts are located at the end of the step rails in the end caps, as noted in diagram below.



Note: *Adjustment is through small hole in the end cap.*

Tighten the rear roller bolts only enough to prevent slippage at the front roller. Turn both tread-belt tension adjustment bolts with a 10mm allen wrench in increments of 1/4 to 1/2 turn each and inspect for proper tension by walking on the belt at a low speed, making sure the belt does not slip. Keep tensioning the bolts until the belt stops slipping.

- **If you feel the belt is tight enough, but it still slips, the problem may be a loose Motor drive belt under the front motor cover.**

DO NOT OVERTIGHTEN – Over tightening will cause belt damage and premature bearing failure.

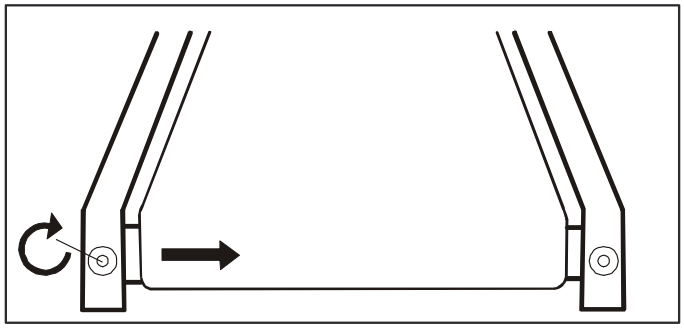
TREADBELT TRACKING ADJUSTMENT:

The performance of your treadmill is dependent on the frame running on a reasonably level surface. If the frame is not level, the front and back roller cannot run parallel, and constant belt adjustment may be necessary.

The treadmill is designed to keep the tread-belt reasonably centered while in use. It is normal for some belts to drift near one side while the belt is running with no one on it. After a few minutes of use, the tread-belt should have a tendency to center itself. If, during use, the belt continues to move toward one side, adjustments are necessary.

TO SET TREADBELT TRACKING:

Use a 10mm Allen wrench to adjust the rear roller. Make tracking adjustments from the **left** side only. Set belt speed at approximately 2 to 3 mph.



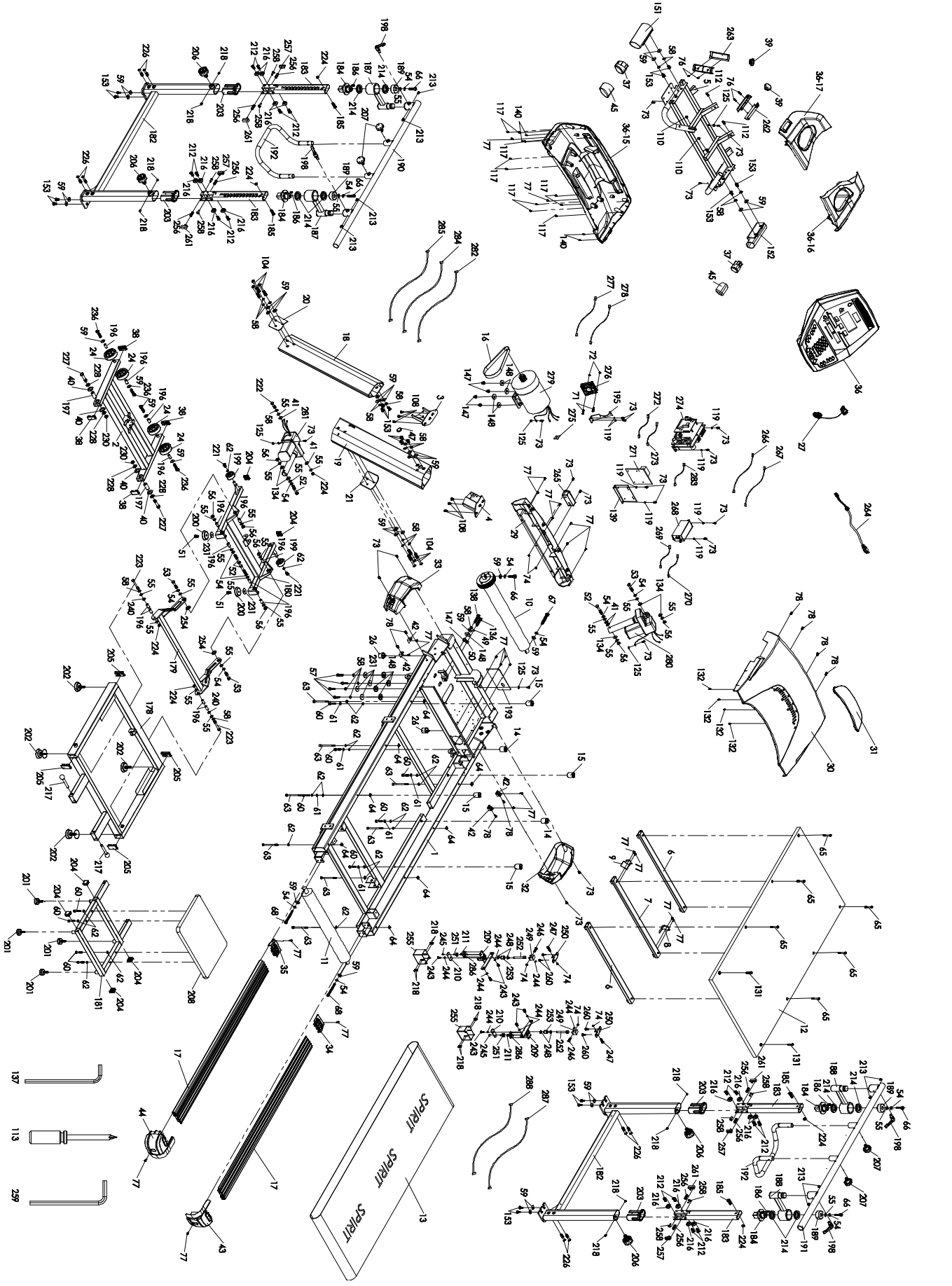
Remember, a small adjustment can make a dramatic difference!

Turn the bolt clockwise to move the belt to the right. Turn the bolt only a 1/4 turn and wait a few minutes for the belt to adjust itself. Continue to make 1/4 rotation turns until the belt stabilizes in the center of the running deck.

The belt may require periodic tracking adjustment depending on use and walking/running characteristics. Some users will affect tracking differently. Expect to make adjustments as required to center the tread-belt. Adjustments will become less of a maintenance concern as the belt is used. Proper belt tracking is an owner responsibility common with all treadmills.

ATTENTION:
DAMAGE TO THE RUNNING BELT RESULTING FROM IMPROPER TRACKING / TENSION ADJUSTMENTS IS NOT COVERED UNDER THE SPIRIT WARRANTY.

MT200 Exploded View Drawing



MT200 Parts List

Dwg #	Part Number	Description	Qty.
1	AA010187-R4	Main Frame	1
2	AA030050-R4	Incline Bracket	1
3	AA060008-R4	Console Mast Locking Assembly (L)	1
4	AA060009-R4	Console Mast Locking Assembly (R)	1
5	AA050057-Q2	Console Support	1
6	AA060010-R4	Running Deck Stabilizer Assembly(A)	2
7	AA060011-R4	Running Deck Stabilizer Assembly(B)	1
8	B130802-ZB	Belt Guide(R)	1
9	B130803-ZB	Belt Guide(L)	1
10	K140049-Z9	Front Roller W/Pulley	1
11	K140048-Z9	Rear Roller	1
12	H180012A-A1	Running Deck	1
13	H0773255-QK-Z5	Running Belt	1
14	P270014	Cushion A, Middle	2
15	P270015	Cushion B, Front & Rear	4
16	N012003	Drive Motor Belt, Poly-V	1
17	M010005A-Z0	1380m/m_Aluminum Foot Rail	2
18	M040003-Z0	Aluminum Upright (L)	1
19	M040004-Z0	Aluminum Upright (R)	1
20	B041400-R4	Upright Fixing Plate(L)	1
21	B041401-R4	Upright Fixing Plate(R)	1
24	P050004-A1	Ø82 × Ø14 × 35m/m_Transportation Wheel	4
26	P270013-A1	Incline Rubber Foot	2
27	N100011A	800m/m_Safety Key	1
29	P010088-JT	Front Motor Cover	1
30	P010087-JT	Motor Top Cover	1
31	P010089-JV	Top Motor Cover Plate	1
32	P010091-JT	Motor Base Cap (R)	1
33	P010090-JT	Motor Base Cap (L)	1
34	P280017-JT	Foot Rail Cap (R)	1
35	P280016-JT	Foot Rail Cap (L)	1
36	ZST001-01	Console Assembly	1
36-15	P020228-JT	Console Bottom Cover	1
36-16	P020227-JT	Console Top Cover(R)	1
36-17	P020226-JT	Console Top Cover(L)	1
37	P040085-A1	Oval Tube End Cap	2
38	P040039-A1	25m/m × 50m/m_Square End Cap	4
39	P040086-A1	Hand Pulse End Cap	2

40	P060368-A1	Stable Wheel Spacer	4
41	P060410-A1	Ø10 × Ø25 × 0.8T_Nylon Washer	4
42	P060021-A1	Motor Cover Anchor(D)	4
43	P030052-JT	Rear Adjustment Base (R)	1
44	P030053-JT	Rear Adjustment Base (L)	1
45	L190005-A1	80m/m_Handgrip Foam	2
47	P040167-A1	30 × 7.6_Round Cap	1
49	J210004-Z1	Ø5 × Ø10 × 1.0T_Flat Washer	1
50	P280001-A1	Ground Isolation Cap	1
51	J011002-Z1	3/8" × 3/4"_Hex Head Bolt	2
52	J013514U-Z2	M10 × P1.5 × 65m/m_Hex Head Bolt	4
53	J013510R-Z2	M10 × P1.5 × 50m/m_Hex Head Bolt	3
54	J260004-ZT	Ø10 × 1.5T_Split Washer	15
55	J210003-ZT	Ø10 × Ø19 × 1.5T_Flat Washer	26
56	J139361-ZT	M10 × P1.5 × 8.0T_Nyloc Nut	7
57	J031006-Z2	3/8" × UNC16 × 1-1/2"_Socket Head Cap Bolt	4
58	J260003-ZT	Ø3/8" × 2.0T_Split Washer	24
59	J210008-ZT	Ø3/8" × Ø25 × 2.0T_Flat Washer	33
60	J033008-Z2	M8 × P1.25 × 40m/m_Socket Head Cap Bolt	10
61	J260007-ZT	Ø8× 1.5T_Split Washer	6
62	J210021-ZT	Ø8 × Ø16 × 1.0T_Flat Washer	20
63	J033017J-Z2	M8 × P1.25 × 110m/m_Socket Head Cap Bolt	8
64	J160013	M8 × P1.25 × 6.5T_Square Nut	8
65	J043011S-Y3	M8 × P1.25 × 55m/m_Flat Head Countersink Bolt	6
66	J033508-Z2	M10 × P1.5 × 40m/m_Socket Head Cap Bolt	5
67	J033518-Z4	M10 × P1.5 × 80m/m_Socket Head Cap Bolt	1
68	J033516-Z2	M10 × P1.5 × 100m/m_Socket Head Cap Bolt	2
71	J354507-Z2	M4 × P0.7 × 35m/m_Phillips Head Screw	2
72	J139411-Z1	M4 × P0.7 × 5.0T_Nyloc Nut	2
73	J352002-Z2	M5 × P0.8 × 12m/m_Phillips Head Screw	21
74	J139161-Z1	M5 × P0.8 × 5.0T_Nyloc Nut	6
76	J514004-Z2	M3 × 12m/m_Tapping Screw	4
77	J612002-Z2	M5 × 12m/m_Tapping Screw	25
78	J392003-Z2	M5 × 15m/m_Sheet Metal Screw	8
104	J021015G-Z2	3/8" × UNC16 × 3-3/4"_Button Head Socket Bolt	6
108	J033002F-Z2	M8 × P1.25 × 12m/m_Socket Head Cap Bolt	6
110	J092001-Z2	M5 × 10m/m_Phillips Head Screw	2
112	J352006-Z2	M5 × 30m/m_Phillips Head Screw	2
113	J330008-Z1	Phillips Head Screw Driver	1
117	J376804-Z2	Ø3.5× 12m/m_Tapping Screw	10
119	J260008-Z2	M5 × 1.5T_Split Washer	8

125	J270001-Z1	M5_Star Washer	5
131	J043007-Y3	M8 × P1.25 × 35m/m_Flat Head Countersink Bolt	2
132	J517002	Ø3 × 8m/m_Tapping Screw	4
134	J240005	Ø10 × Ø24 × 3.0T_Nylon Washer	5
136	J031008-Z4	3/8" × UNC16 × 2"_Socket Head Cap Bolt	1
137	J330049-Z1	5mm Allen Wrench	1
138	J031009-Z4	3/8" × UNC16 × 2-1/4"_Socket Head Cap Bolt	1
139	B060025-R4	Inverter Mounting Bracket	1
140	J524001	M3 × 10m/m_Sheet Metal Screw	4
147	J660001	Ø10 × Ø14 ×14m/m_Bushing	5
148	J240007	Ø13 × Ø35 × 5.0T_Nylon Washer	9
151	AA060131-Q2	Left Handgrip	1
152	AA060132-Q2	Right Handgrip	1
153	J021002-Z2	3/8" × UNC16 × 3/4" _Button Head Socket Bolt	20
178	AA020080-R4	Frame Base	1
179	AA060119-R4	Folding Assembly Bracket	1
180	AA030051-R4	Incline Bracket	1
181	AA060126-R4	Step Up Frame	1
182	AA040143-R4	Parallel Bar Frame	2
183	AA060124-Z2	P. Bar Vertical Adjustment Tube	4
184	AA060125-Z2	P. Bar Bearing Inner Race	4
185	J021006-Z1	3/8" × UNC16 × 1-1/2" _Button Head Socket Bolt	4
186	J032014-Z1	M5 × 6m/m_Socket Head Cap Bolt	4
187	AA060120-R4	P. Bar Horizontal Adjustment Arm (L)	2
188	AA060121-R4	P. Bar Horizontal Adjustment Arm (R)	2
189	C060043-R4	P.Bar Horizontal Adj. Cap	4
190	AA060122-Q2-A	Parallel Handle Bar (L)	1
191	AA060123-Q2-A	Parallel Handle Bar (R)	1
192	TT020069-R4	P.Bar Lift Assist Handle	2
193	B030081-R4	Fan Back Plate	1
195	B070041-R4	Fan Mounting Plate	1
196	C120045	Ø14 × Ø10 × 25m/m_Podwer metallurgy Sleeve	14
197	C120047	Ø20 × Ø13.4 × 41m/m_Podwer metallurgy Sleeve	2
198	N200066	M14 × 17m/m_Seat/Handlebar Adj. Locking Lever	4
199	P050034-A1	Ø54 × 25m/m_Transportation Wheel	2
200	P270066	Ø60 × 15m/m_Rubber Foot	2
201	P060018-A1	Ø37 × 3/8"_Adjustment Foot Pad	4
202	P270040-A1	Ø55 × 3/8"_Adjustment Foot Pad	4
203	P040048-A1	Plastic Tube Insert	4
204	P040134-A1	30m/m × 30m/m_Square End Cap	6
205	P040002-A1	30m/m × 60m/m_Square End Cap	4

206	K150005	Ø57 × M14_Locking Knob	4
207	P060555-A1	3/8" × UNC16 × 25m/m_Brake Tension Knob	4
208	H170009	Step Up Platform	1
209	AA060019-Q2	Step Sensor Mounting Plate	2
210	B030084-Q2	Step Magnet Plate	2
211	N041005-Z2	Ø10 × 3T × N35_Braking Magnet	2
212	J043005-Y3	M8 × P1.25 × 25m/m_Flat Head Countersink Bolt	16
213	J552002-Z1	M5 × P0.8 × 12m/m_Flat Head Socket Screw	8
214	K051008	P. Bar Bearing	8
216	P050027-A1	PU Wheel	16
217	K150006	Step Up Frame Pop Pin	2
218	J354515-ZU	M4 × P0.7 × 8m/m_Phillips Head Screw	16
221	J010503-Z1	5/16" × UNC18 × 5/8"_Hex Head Bolt	2
222	J011006E-Y1	3/8" × UNC16 × 1-1/2" _Hex Head Bolt	1
223	J011012J-Z1	3/8" × UNC16 × 3" _Hex Head Bolt	2
224	J139011-Z1	3/8" × UNC16 × 7.0T _Nyloc Nut	7
225	J129021-Z1	3/8" × UNC16 × 7.0T _Nut	4
226	J021008R	3/8" × UNC16 × 2" _Button Head Socket Bolt	8
227	J011508E	1/2" × UNC13 × 2-1/4"_Hex Head Bolt	2
228	J210041-ZT	Ø13 × Ø26 × 2.0T_Flat Washer	4
230	J139111F-ZL	1/2" × UNC20 × 8.0T_Nyloc Nut	2
231	J210024-ZT	Ø3/8" × Ø35 × 2.0T_Flat Washer	6
236	J031007U-Y9	3/8" × UNC16 ×1-3/4"_Socket Head Cap Bolt	4
240	J210060	Ø14 × Ø20 × 2.0T_Flat Washer	2
243	J032003	M5 × 15m/m_Socket Head Cap Bolt	6
244	J210006-Z1	Ø5 × Ø12 × 1.0T_Flat Washer	8
245	J129621-Z1	M6 × P1.0 × 5.0T_Nut	2
246	J092006-Z1	M5 × 30m/m_Phillips Head Screw	2
247	J092007-Z1	M5 × 35m/m_Phillips Head Screw	2
248	J310010-Z4	Ø15_C Ring	4
249	C120060-Z2	U-Joint, Step Sensor	2
250	B100089-Q2	U-Joint Mounting Plate	2
251	M050007	Step Magnet Holder	2
252	C060061-Z2	Plunger, Step Sensor	2
253	K051010	Linear Bearing, Step Sensor	2
254	P060367-A1	Bushing, Incline Frame	2
255	B100090-Q2	Cover, Step Sensor Assembly	2
256	K010006	Ø13.5 × 30m/m_Spring	8
257	P270064	Brake Pad, P. Bar Slide - 1	4
258	J160007-Y3	M6 × 19m/m_Nut	8
259	J330020	6mm Allen Wrench	1

260	J022504-Z1	M6 × 12m/m_Socket Head Cap Bolt	4
261	P270063	Brake Pad, P. Bar Slide - 2	4
262	F090218	Hand Pulse Assembly	1
263	F090219	Hand Pulse Assembly	1
264	*Country Specific	Power Cord	1
265	F030051	A.C. Input Module	1
266	E010814	300m/m_Connecting Wire (White)	1
267	E010815	300m/m_Connecting Wire (Black)	1
268	F060009	A.C. Power Filter	1
269	E010786	150m/m_Connecting Wire (White)	1
270	E010787	150m/m_Connecting Wire (Black)	1
271	D150903	Lower Control Board	1
272	E010784	200m/m_Connecting Wire (White)	1
273	E010785	200m/m_Connecting Wire (Black)	1
274	D170003	Inverter, A.C. Motor	1
275	D170101	Encoder, A.C. Motor	1
276	F040202	Fan, Motor Cooling	1
277	E010053	500m/m_Motor Fan Connecting Cable (Black)	1
278	E010054	500m/m_Motor Fan Connecting Cable (White)	1
279	G020601	Drive Motor	1
280	G110056	Front Incline Motor	1
281	G110096	Rear Incline Motor	1
282	E020088	Inverter Signal Cable, 2100m/m	1
283	E020089	Inverter to LCB Cable, 800m/m	1
284	E020742	Rear Incline Cable, 2100m/m	1
285	D170901	RS-485 Communication Cable	1
286	D150901	Step Sensor Board	2
287	E070302	Step Sensor Cable, Right	1
288	E070303	Step Sensor Cable, Left	1

Maintenance Menu in console software:

The console has built in maintenance/diagnostic software. The software will allow you to change the console settings from English to Metric and turn off the beeping of the speaker when a key is pressed for example. To enter the Maintenance menu (may be called Engineering mode, depending on version) press and hold down the Start, Stop and Enter keys. Keep holding the keys down for about 5 seconds and the message window will display “Engineering mode”. Press the enter button to access the menu below:

1. **Maintenance Mode**
    a. Press and hold the Start, Stop and Enter key at the same time, until the display shows “**ENGINEERING MODE**” (it may say maintenance menu, depending on version). Press the Enter key. You can now scroll through the menu using the up and down keys. Use the Stop key to return to previous menu selection. The menu selections are:
    b. **Key Test –** Press each key to verify it is functioning correctly
    c. Display test - Lights all LED lights
    d. Functions
        i. **Sleep -** Turns **SLEEP MODE ON** or **OFF**. When off, display power is always on.
        ii. **Pause -** Turns **PAUSE MODE ON** or **OFF**. When on, Pause lasts 30 minutes.
        iii. **Odometer reset -** Reset odometer readings
        iv. **Units -** Set display to **ENGLISH** or **METRIC** readings
        v. **Grade Return (GS Mode) -** Turns **GS MODE ON** or **OFF**. Returns the elevation to lowest setting when pause is pressed
        vi. **Beep –** Turns the speaker (beep sound) on or off.
        vii. **Service Mode:**
            1. **Incline**
                a. MW scrolls: **“USE INCLINE KEYS FOR FRONT USE SPEED KEYS FOR REAR”** then switch to VR display below.
                b. Incline keys operate front motor, speed keys operate rear motor. Hold down up/down key to operate motor, stop when key is released. Motor is allowed to move until limit switch activated.
                c. MW displays A/D values for both position sensors. Example of the readings F 920 R 70. F=Front incline sensor and R = Rear incline sensor. The readings will be opposite: when at lowest incline the front will show a large number and rear will be small.
            2. **Drive Motor**
                a. MW displays: **“USE SPEED KEYS TO MOVE MOTOR”.** Each key press increases motor speed 0.1 mph/kph
                b. MW then shows: RPM 000 AMP 00.0. The sensor reading indicates motor RPM, not belt speed. The AMP is measuring Motor current
            3. **Motor Brake**
                a. Brake ON (brake coil turned off) (User press enter to turn Brake OFF)
            4. **Step Sensors**
                a. Test
                    i. Use sensor outputs to light DM similar to Symmetry display. This test is only to make sure the sensors are functioning and does not test accuracy. The DM graph shows left and right sensor activity when stepping on the deck. Both sides of the graph will light at the same time, but the side the user steps with would show more segments lit.

b. Calibration

i. MW: **START LEFT SIDE**

ii. When Start is pressed the MW shows: **AD _ _ _ TGT 65**

iii. Speaker will beep slowly when magnet distance is too far, quickly when near and steady when correct.

iv. Press enter to continue

v. MW: **START RIGHT SIDE**

vi. When Start is pressed the MW shows: **AD _ _ _ TGT 65**

vii. Speaker will beep slowly when magnet distance is too far, quickly when near and steady when correct.

viii. User press enter or stop to end calibration

e. Acceleration Key Lock –MW show "**ACCEL KEY**", press enter then MW shows "**ACCEL LOCKED"**. This is the default. If the user presses the up or down key the MW shows "**ACCEL UNLOCKED".** Press enter to exit.

f. Speed limit setting –MW shows "**SPEED LIMIT**", press enter. The MW shows **Limit 10.0 MPH.** This is the default setting and is the top forward speed of the treadmill.

i. If the user presses the down key the MW shows **Limit 9.9 MPH.** The top limit can be changed in 0.1 MPH increments.

ii. The minimum speed limit setting is 3.0 mph.

g. Security –MW show "**SECURITY**" MW shows "**CHILD LOCK ON " or OFF ,** Sets the Child Lock function. This function locks out the keypad until a pre-determined key sequence is pressed. Key sequence = Start & Enter held down together until unlocked.

2. **Factory and Acceleration Settings**

a. Enter the Factory settings; press Start and Speed Fast keys while console is in power up reset. User presses enter

i. **UNITS: ENGLISH**

1. The default setting is English. User can press any up/down arrows to change to Metric. User presses enter.

ii. **ADJUST MIN SPEED THEN PRESS ENTER**

1. Default value is 0.1 mph and can be adjusted up to 0.5mph.
2. The speed number to be shown in the speed window.

iii. **ADJUST MAX SPEED THEN PRESS ENTER**

1. Default value is 10.0 mph and can be adjusted down to 3.0 mph.
2. The speed number to be shown in the speed window

iv. **ADJUST REVERSE SPEED MAX THEN PRESS ENTER**

1. Default value is 3.0 mph and can be adjusted down to 1.0 mph and up to 5.0 mph.

v. **ADJUST BELT SPEED ACCELERATION TIME PER EACH 1.0 MPH**

1. The default is 0:03 seconds and will be shown in the Time window.
2. The time can be adjusted down to 0:01 and up to 1:00 minute

vi. **ADJUST BELT SPEED DECELERATION TIME PER EACH 1.0 MPH**

1. The default is 0:03 seconds and will be shown in the Time window.
2. The time can be adjusted down to 0:01 and up to 1:00 minute

vii. Press Enter for Grade Calibration Or To Exit Hold Stop Key Until Reset.

viii. Adjust Max Incline Then Press Enter

1. The default value is 15 and can be adjusted down to 10

ix. Adjust Max Decline Then Press Start to calibrate

1. The default value is 5 and can be adjusted up to 10

x. If Grade calibration is successful the MW shows "Passed" for 3 seconds then exit to idle mode.

Specifications:

Set-Up Dimensions:	Length:	94” (239 cm) with rear step.
	Width:	36” (91.4 cm)
	Height:	56.5” (143.5cm)
Product Weight:	506 Lbs. (230 Kgs)	
Patient Weight Capacity:	440 Lbs. (200 Kgs.)	
Power:	220~240 Volts A.C., 10 Amps, 50 Hz.	
Speed:	Forward:	0.0 to 10.0 mph (0.0 to 16 kph)
	Reverse	0.0 to 3.0 mph (0.0 to 5 kph)
Incline:	Front:	0 to 15% Grade
	Rear:	0 to 10% Grade

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MT **200** Owner's Manual
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